

Persil Professional Biological Liquid

Revision: 2024-08-08

Version: 16.3

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Persil Professional Biological Liquid

Persil is a registered trade mark and is used under licence of Unilever

UFI: CFM5-803P-Y00H-U2JV

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use: Laundry detergent.

Uses advised against: Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :

AISE_SWED_PW_8a_1

PC35-Washing and cleaning products

AISE_SWED_PW_1_1

AISE_SWED_PW_4_1

AISE_SWED_PW_19_1

PC35-Washing and cleaning products

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [Maarssebroeksedijk 2, 3542DN Utrecht], The Netherlands

Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: customerservice.uk@solenis.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Eye irritation, Category 2 (H319)

Skin sensitisation, Category 1 (H317)

Chronic aquatic toxicity, Category 3 (H412)

2.2 Label elements



Signal word: Warning.

Contains 2-methyl-2H-isothiazol-3-one (Methylisothiazolinone), 3(2H)-Isothiazolone, 2-octyl- (Octylisothiazolinone)

Hazard statements:

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P280 - Wear protective gloves.

P501 - Dispose of unused content as chemical waste.

Persil Professional Biological Liquid

Further indications on the label:

Contains: preservative.

2.3 Other hazards

No other hazards known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

| Ingredient(s) | EC number | CAS number | REACH number | Classification | Notes | Weight percent |
|---|-----------|------------|-------------------|--|-------|----------------|
| C12-14 alcohols, ethoxylated (7EO) | [4] | 68439-50-9 | [4] | Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412) | | 3-10 |
| sodium alkylbenzenesulphonate | 270-115-0 | 68411-30-3 | 01-211948942-8-22 | Acute toxicity - Oral, Category 4 (H302) Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412) | | 1-3 |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | [4] | 68891-38-3 | [4] | Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318) | | 1-3 |
| Triethanolamine dodecylbenzenesulfonate | 248-406-9 | 27323-41-7 | - | Acute toxicity - Oral, Category 3 (H301) Skin irritation, Category 2 (H315) Eye irritation, Category 2 (H319) | | 1-3 |
| methanol | 200-659-6 | 67-56-1 | - | Flammable liquids, Category 2 (H225) Acute toxicity - Oral, Category 3 (H301) Acute toxicity - Dermal, Category 3 (H311) Acute toxicity - Inhalation, Category 3 (H331) Specific target organ toxicity - Single exposure, Category 1 (H370) | | 0.1-1 |
| 3(2H)-Isothiazolone, 2-octyl- | 247-761-7 | 26530-20-1 | - | Acute toxicity - Inhalation, Category 2 (H330) Acute toxicity - Oral, Category 3 (H301) Acute toxicity - Dermal, Category 3 (H311) Skin corrosion, Category 1B (H314) Serious eye damage, Category 1 (H318) Skin sensitisation, Sub-category 1A (H317) Acute aquatic toxicity, Category 1 M=100 (H400) Chronic aquatic toxicity, Category 1 M=100 (H410) | | 0.01-0.1 |
| 2-methyl-2H-isothiazol-3-one | 220-239-6 | 2682-20-4 | [6] | Acute toxicity - Inhalation, Category 2 (H330) Acute toxicity - Oral, Category 3 (H301) Acute toxicity - Dermal, Category 3 (H311) Skin corrosion, Category 1B (H314) EUH071 Serious eye damage, Category 1 (H318) Skin sensitisation, Sub-category 1A (H317) Acute aquatic toxicity, Category 1 M=10 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410) | | 0.01-0.1 |

Specific concentration limits

Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts:

- Serious eye damage, Category 1 (H318) >= 10% > Eye irritation, Category 2 (H319) >= 5%

3(2H)-Isothiazolone, 2-octyl-:

- Skin sensitisation, Category 1 (H317) >= 0.0015%

2-methyl-2H-isothiazol-3-one:

- Skin sensitisation, Category 1 (H317) >= 0.0015%

Workplace exposure limit(s), if available, are listed in subsection 8.1.

ATE, if available, are listed in section 11.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

[6] Exempted: biocidal active. See Article 15(2) of Regulation (EC) No 1907/2006.

For the full text of the H and EUH phrases mentioned in this Section, see Section 16..

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information:

Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident.

Inhalation:

Get medical attention or advice if you feel unwell.

Skin contact:

Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.

Eye contact:

Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention.

Persil Professional Biological Liquid

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: No known effects or symptoms in normal use.

Skin contact: May cause an allergic skin reaction.

Eye contact: Causes severe irritation.

Ingestion: No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear suitable gloves.

6.2 Environmental precautions

Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Measures to prevent fire and explosions:**

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:

Follow general hygiene considerations recognised as common good workplace practices. Keep away from food, drink and animal feeding stuffs. Keep out of reach of children. Do not mix with other products unless advised by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. Keep out of reach of children.

For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Workplace exposure limits**

Air limit values, if available:

| Ingredient(s) | UK - Long term | UK - Short term |
|---------------|----------------|-----------------|
|---------------|----------------|-----------------|

| | value(s) | value(s) |
|----------|----------------------------------|----------------------------------|
| methanol | 200 ppm 266 mg/m ³ | 250 ppm 333 mg/m ³ |

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values

Human exposure

DNEL/DMEL oral exposure - Consumer (mg/kg bw)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available | No data available | No data available | No data available |
| sodium alkylbenzenesulphonate | - | - | - | 0.425 |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | No data available | No data available | No data available |
| Triethanolamine dodecylbenzenesulfonate | No data available | No data available | No data available | No data available |
| methanol | - | 8 | - | 4 |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | No data available | No data available | No data available |
| 2-methyl-2H-isothiazol-3-one | - | - | - | 0.027 |

DNEL/DMEL dermal exposure - Worker

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|---|----------------------------|--|---------------------------|---|
| C12-14 alcohols, ethoxylated (7EO) | No data available | No data available | No data available | No data available |
| sodium alkylbenzenesulphonate | - | - | - | 119 |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | No data available | No data available | No data available |
| Triethanolamine dodecylbenzenesulfonate | No data available | No data available | No data available | No data available |
| methanol | No data available | 40 | No data available | 40 |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | No data available | No data available | No data available |
| 2-methyl-2H-isothiazol-3-one | - | - | - | - |

DNEL/DMEL dermal exposure - Consumer

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|---|----------------------------|--|---------------------------|---|
| C12-14 alcohols, ethoxylated (7EO) | No data available | No data available | No data available | No data available |
| sodium alkylbenzenesulphonate | - | - | - | 42.5 |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | No data available | No data available | No data available |
| Triethanolamine dodecylbenzenesulfonate | No data available | No data available | No data available | No data available |
| methanol | No data available | 8 | No data available | 8 |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | No data available | No data available | No data available |
| 2-methyl-2H-isothiazol-3-one | - | - | - | - |

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available | No data available | No data available | No data available |
| sodium alkylbenzenesulphonate | - | - | - | 6 |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | No data available | No data available | No data available |
| Triethanolamine dodecylbenzenesulfonate | No data available | No data available | No data available | No data available |
| methanol | 260 | 260 | 260 | 260 |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | No data available | No data available | No data available |
| 2-methyl-2H-isothiazol-3-one | - | - | - | - |

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---|----------------------------|-------------------------------|---------------------------|------------------------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available | No data available | No data available | No data available |
| sodium alkylbenzenesulphonate | - | - | - | 1.5 |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | No data available | No data available | No data available |
| Triethanolamine dodecylbenzenesulfonate | No data available | No data available | No data available | No data available |
| methanol | 50 | 50 | 50 | 50 |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | No data available | No data available | No data available |
| 2-methyl-2H-isothiazol-3-one | - | - | - | - |

Environmental exposure

Environmental exposure - PNEC

Persil Professional Biological Liquid

| Ingredient(s) | Surface water, fresh (mg/l) | Surface water, marine (mg/l) | Intermittent (mg/l) | Sewage treatment plant (mg/l) |
|---|-----------------------------|------------------------------|---------------------|-------------------------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available | No data available | No data available | No data available |
| sodium alkylbenzenesulphonate | 0.268 | 0.0268 | 0.0167 | 3.43 |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | No data available | No data available | No data available |
| Triethanolamine dodecylbenzenesulfonate | No data available | No data available | No data available | No data available |
| methanol | 154 | 15.4 | 1540 | 100 |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | No data available | No data available | No data available |
| 2-methyl-2H-isothiazol-3-one | - | - | - | - |

Environmental exposure - PNEC, continued

| Ingredient(s) | Sediment, freshwater (mg/kg) | Sediment, marine (mg/kg) | Soil (mg/kg) | Air (mg/m³) |
|---|------------------------------|--------------------------|-------------------|-------------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available | No data available | No data available | No data available |
| sodium alkylbenzenesulphonate | 8.1 | 6.8 | 35 | - |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | No data available | No data available | No data available |
| Triethanolamine dodecylbenzenesulfonate | No data available | No data available | No data available | No data available |
| methanol | 570.4 | - | 23.5 | - |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | No data available | No data available | No data available |
| 2-methyl-2H-isothiazol-3-one | - | - | - | - |

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

REACH use scenarios considered for the undiluted product:

| | SWED - Sector-specific worker exposure description | LCS | PROC | Duration (min) | ERC |
|------------------------------------|--|-----|---------|----------------|-------|
| PC35-Washing and cleaning products | PC35-Washing and cleaning products | C | | - | ERC8a |
| Manual transfer and dilution | AISE_SWED_PW_8a_1 | PW | PROC 8a | 60 | ERC8a |

Personal protective equipment

Eye / face protection:

Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product (EN 16321 / EN 166).

Hand protection:

Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm

In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

Body protection:

No special requirements under normal use conditions.

Respiratory protection:

No special requirements under normal use conditions.

Environmental exposure controls:

No special requirements under normal use conditions.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 1

Appropriate engineering controls: No special requirements under normal use conditions.

Appropriate organisational controls: No special requirements under normal use conditions.

REACH use scenarios considered for the diluted product:

| | SWED | LCS | PROC | Duration (min) | ERC |
|------------------------------------|------------------------------------|-----|------|----------------|-------|
| PC35-Washing and cleaning products | PC35-Washing and cleaning products | C | - | - | ERC8a |

Persil Professional Biological Liquid

| | | | | | |
|--|-------------------|----|---------|-----|-------|
| Automatic application in a dedicated closed system | AISE_SWED_PW_1_1 | PW | PROC 1 | 480 | ERC8a |
| Manual application | AISE_SWED_PW_19_1 | PW | PROC 19 | 480 | ERC8a |
| Automatic application in a dedicated system | AISE_SWED_PW_4_1 | PW | PROC 4 | 480 | ERC8a |

Personal protective equipment

| | |
|--------------------------------|--|
| Eye / face protection: | No special requirements under normal use conditions. |
| Hand protection: | Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary. |
| Body protection: | No special requirements under normal use conditions. |
| Respiratory protection: | No special requirements under normal use conditions. |

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Information in this section refers to the product, unless it is specifically stated that substance data is listed

| | Method / remark |
|---|--|
| Physical state: Liquid | |
| Colour: Hazy , Dark , Green Blue | |
| Odour: Product specific | |
| Odour threshold: Not applicable | |
| Melting point/freezing point (°C): Not determined | Not relevant to classification of this product |
| Initial boiling point and boiling range (°C): Not determined | See substance data |

Substance data, boiling point

| Ingredient(s) | Value (°C) | Method | Atmospheric pressure (hPa) |
|---|-------------------|--------|----------------------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available | | |
| sodium alkylbenzenesulphonate | No data available | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | | |
| Triethanolamine dodecylbenzenesulfonate | No data available | | |
| methanol | No data available | | |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | | |
| 2-methyl-2H-isothiazol-3-one | No data available | | |

| | Method / remark |
|--|-----------------|
| Flammability (solid, gas): Not applicable to liquids | |
| Flammability (liquid): Not flammable. | |
| Flash point (°C): > 93 °C | closed cup |
| Sustained combustion: Not applicable. (UN Manual of Tests and Criteria, section 32, L.2) | |
| Lower and upper explosion limit/flammability limit (%): Not determined | |

Substance data, flammability or explosive limits, if available:

| | Method / remark |
|---|-----------------------------|
| Autoignition temperature: Not determined | |
| Decomposition temperature: Not applicable. | |
| pH: Not applicable | ISO 4316 |
| Dilution pH: ≈ 8 (1 %) | ISO 4316 |
| Kinematic viscosity: Not determined | DM-006 Viscosity - Standard |
| Solubility in / Miscibility with water: Fully miscible | |

Substance data, solubility in water

| Ingredient(s) | Value (g/l) | Method | Temperature (°C) |
|---|-------------------|------------------|------------------|
| C12-14 alcohols, ethoxylated (7EO) | Soluble | Method not given | |
| sodium alkylbenzenesulphonate | > 250 | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | | |
| Triethanolamine dodecylbenzenesulfonate | No data available | | |
| methanol | No data available | | |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | | |
| 2-methyl-2H-isothiazol-3-one | No data available | | |

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

| | Method / remark |
|--|--------------------|
| Vapour pressure: Not determined | See substance data |

Persil Professional Biological Liquid

Substance data, vapour pressure

| Ingredient(s) | Value (Pa) | Method | Temperature (°C) |
|---|-------------------|--------|------------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available | | |
| sodium alkylbenzenesulphonate | No data available | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | | |
| Triethanolamine dodecylbenzenesulfonate | No data available | | |
| methanol | No data available | | |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | | |
| 2-methyl-2H-isothiazol-3-one | No data available | | |

Relative density: ≈ 1.02 (20 °C)

Relative vapour density: No data available.

Particle characteristics: No data available.

Method / remark

OECD 109 (EU A.3)

Not relevant to classification of this product

Not applicable to liquids.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties: Not explosive. Vapours may form explosive mixtures with air.

Oxidising properties: Not oxidising.

Corrosion to metals: Not corrosive

9.2.2 Other safety characteristics

No other relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

None known under normal use conditions.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Mixture data: .

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000

ATE - Dermal (mg/kg): >2000

ATE - Inhalatory, vapours (mg/l): >20

Eye irritation and corrosivity

Result: Eye irritant 2

Method: Weight of evidence

Substance data: where relevant and available, are listed below:.

Acute toxicity

Acute oral toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) | ATE Oral (mg/kg) |
|------------------------------------|------------------|---------------|---------|-------------------|-------------------|------------------|
| C12-14 alcohols, ethoxylated (7EO) | LD ₅₀ | > 300 - 2000 | Rat | Read across | | Not established |
| sodium alkylbenzenesulphonate | LD ₅₀ | 1080 | Rat | OECD 401 (EU B.1) | | 1080 |

Persil Professional Biological Liquid

| | | | | | | |
|---|------------------|-------------------|--------|-------------------|--|-----------------|
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | LD ₅₀ | > 2000 | | | | Not established |
| Triethanolamine dodecylbenzenesulfonate | | No data available | Rabbit | | | 4199 |
| methanol | | No data available | | | | Not established |
| 3(2H)-Isothiazolone, 2-octyl- | | No data available | | | | 125 |
| 2-methyl-2H-isothiazol-3-one | LD ₅₀ | 120 | Rat | OECD 401 (EU B.1) | | 120 |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) | ATE Dermal (mg/kg) |
|---|------------------|-------------------|---------|-------------------|-------------------|--------------------|
| C12-14 alcohols, ethoxylated (7EO) | LD ₅₀ | > 2000 | Rabbit | Method not given | | Not established |
| sodium alkylbenzenesulphonate | LD ₅₀ | > 2000 | Rat | OECD 402 (EU B.3) | | Not established |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | No data available | | | | Not established |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | | Not established |
| methanol | | No data available | | | | Not established |
| 3(2H)-Isothiazolone, 2-octyl- | | No data available | | | | 311 |
| 2-methyl-2H-isothiazol-3-one | LD ₅₀ | 242 | Rat | OECD 402 (EU B.3) | 24 hours | 242 |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|------------------|-------------------|---------|-------------------|-------------------|
| C12-14 alcohols, ethoxylated (7EO) | | No data available | | | |
| sodium alkylbenzenesulphonate | | No data available | | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | No data available | | | |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | |
| methanol | | No data available | | | |
| 3(2H)-Isothiazolone, 2-octyl- | | No data available | | | |
| 2-methyl-2H-isothiazol-3-one | LC ₅₀ | (mist) 0.11 | Rat | OECD 403 (EU B.2) | 4 hours |

Acute inhalative toxicity, continued

| Ingredient(s) | ATE - inhalation, dust (mg/l) | ATE - inhalation, mist (mg/l) | ATE - inhalation, vapour (mg/l) | ATE - inhalation, gas (mg/l) |
|---|-------------------------------|-------------------------------|---------------------------------|------------------------------|
| C12-14 alcohols, ethoxylated (7EO) | Not established | Not established | Not established | Not established |
| sodium alkylbenzenesulphonate | Not established | Not established | Not established | Not established |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | Not established | Not established | Not established | Not established |
| Triethanolamine dodecylbenzenesulfonate | Not established | Not established | Not established | Not established |
| methanol | Not established | Not established | Not established | Not established |
| 3(2H)-Isothiazolone, 2-octyl- | Not established | Not established | Not established | Not established |
| 2-methyl-2H-isothiazol-3-one | Not established | 0.11 | Not established | Not established |

Irritation and corrosivity

Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|-------------------|---------------|
| C12-14 alcohols, ethoxylated (7EO) | Not irritant | | Read across | |
| sodium alkylbenzenesulphonate | Irritant | Rabbit | OECD 404 (EU B.4) | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | Irritant | | | |
| Triethanolamine dodecylbenzenesulfonate | No data available | | | |
| methanol | No data available | | | |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | | | |
| 2-methyl-2H-isothiazol-3-one | Corrosive | | | |

Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|-------------------|---------------|
| C12-14 alcohols, ethoxylated (7EO) | Severe damage | Rabbit | Read across | |
| sodium alkylbenzenesulphonate | Corrosive | Rabbit | OECD 405 (EU B.5) | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | Severe damage | | | |
| Triethanolamine dodecylbenzenesulfonate | No data available | | | |
| methanol | No data available | | | |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | | | |

Persil Professional Biological Liquid

| | | | | |
|------------------------------|-------------------|--|--|--|
| 2-methyl-2H-isothiazol-3-one | No data available | | | |
|------------------------------|-------------------|--|--|--|

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------------------------|---------|--------|---------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available | | | |
| sodium alkylbenzenesulphonate | Not irritating to respiratory tract | | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | | | |
| Triethanolamine dodecylbenzenesulfonate | No data available | | | |
| methanol | No data available | | | |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | | | |
| 2-methyl-2H-isothiazol-3-one | No data available | | | |

Sensitisation

Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|---|-------------------|------------|--------------------------|-------------------|
| C12-14 alcohols, ethoxylated (7EO) | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT | |
| sodium alkylbenzenesulphonate | Not sensitising | Guinea pig | OECD 406 (EU B.6) / GPMT | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | | | |
| Triethanolamine dodecylbenzenesulfonate | No data available | | | |
| methanol | No data available | | | |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | | | |
| 2-methyl-2H-isothiazol-3-one | Sensitising | Guinea pig | | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|---------|--------|---------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available | | | |
| sodium alkylbenzenesulphonate | No data available | | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | | | |
| Triethanolamine dodecylbenzenesulfonate | No data available | | | |
| methanol | No data available | | | |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | | | |
| 2-methyl-2H-isothiazol-3-one | No data available | | | |

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

| Ingredient(s) | Result (in-vitro) | Method (in-vitro) | Result (in-vivo) | Method (in-vivo) |
|---|---|---|-------------------|------------------|
| C12-14 alcohols, ethoxylated (7EO) | No evidence for mutagenicity, negative test results | Read across | No data available | |
| sodium alkylbenzenesulphonate | No evidence for mutagenicity, negative test results | OECD 471 (EU B.12/13) OECD 476 OECD 473 | No data available | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | | No data available | |
| Triethanolamine dodecylbenzenesulfonate | No data available | | No data available | |
| methanol | No data available | | No data available | |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | | No data available | |
| 2-methyl-2H-isothiazol-3-one | No evidence for mutagenicity, negative test results | OECD 471 (EU B.12/13) | No data available | |

Carcinogenicity

| Ingredient(s) | Effect |
|---|-------------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available |
| sodium alkylbenzenesulphonate | No data available |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available |
| Triethanolamine dodecylbenzenesulfonate | No data available |
| methanol | No data available |
| 3(2H)-Isothiazolone, 2-octyl- | No data available |
| 2-methyl-2H-isothiazol-3-one | No data available |

Toxicity for reproduction

| Ingredient(s) | Endpoint | Specific effect | Value (mg/kg bw/d) | Species | Method | Exposure time | Remarks and other effects reported |
|------------------------------------|----------|---------------------|--------------------|---------|---------------|---------------|------------------------------------|
| C12-14 alcohols, ethoxylated (7EO) | | | No data available | | | | |
| sodium | NOAEL | Teratogenic effects | 300 | Rat | Non guideline | | No known significant effects or |

Persil Professional Biological Liquid

| | | | | | | | |
|---|--|--|-------------------|--|------|--|------------------|
| alkylbenzenesulphonate | | | | | test | | critical hazards |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | | No data available | | | | |
| Triethanolamine dodecylbenzenesulfonate | | | No data available | | | | |
| methanol | | | No data available | | | | |
| 3(2H)-Isothiazolone, 2-octyl- | | | No data available | | | | |
| 2-methyl-2H-isothiazol-3-one | | | No data available | | | | |

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|---|----------|--------------------|---------|--------|----------------------|--------------------------------------|
| C12-14 alcohols, ethoxylated (7EO) | | No data available | | | | |
| sodium alkylbenzenesulphonate | | No data available | | | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | No data available | | | | |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | | |
| methanol | | No data available | | | | |
| 3(2H)-Isothiazolone, 2-octyl- | | No data available | | | | |
| 2-methyl-2H-isothiazol-3-one | | No data available | | | | |

Sub-chronic dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|---|----------|--------------------|---------|--------|----------------------|--------------------------------------|
| C12-14 alcohols, ethoxylated (7EO) | | No data available | | | | |
| sodium alkylbenzenesulphonate | | No data available | | | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | No data available | | | | |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | | |
| methanol | | No data available | | | | |
| 3(2H)-Isothiazolone, 2-octyl- | | No data available | | | | |
| 2-methyl-2H-isothiazol-3-one | | No data available | | | | |

Sub-chronic inhalation toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|---|----------|--------------------|---------|--------|----------------------|--------------------------------------|
| C12-14 alcohols, ethoxylated (7EO) | | No data available | | | | |
| sodium alkylbenzenesulphonate | | No data available | | | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | No data available | | | | |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | | |
| methanol | | No data available | | | | |
| 3(2H)-Isothiazolone, 2-octyl- | | No data available | | | | |
| 2-methyl-2H-isothiazol-3-one | | No data available | | | | |

Chronic toxicity

| Ingredient(s) | Exposure route | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time | Specific effects and organs affected | Remark |
|------------------------------------|----------------|----------|--------------------|---------|--------|---------------|--------------------------------------|--------|
| C12-14 alcohols, ethoxylated (7EO) | | | No data available | | | | | |
| sodium alkylbenzenesulphonate | | | No data available | | | | | |
| Alcohols C12-14, | | | No data | | | | | |

Persil Professional Biological Liquid

| | | | | | | | |
|--|--|--|-------------------|--|--|--|--|
| ethoxylated (3EO), sulphated, sodium salts | | | available | | | | |
| Triethanolamine dodecylbenzenesulfonate | | | No data available | | | | |
| methanol | | | No data available | | | | |
| 3(2H)-Isothiazolone, 2-octyl- | | | No data available | | | | |
| 2-methyl-2H-isothiazol-3-one | | | No data available | | | | |

STOT-single exposure

| Ingredient(s) | Affected organ(s) |
|---|-------------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available |
| sodium alkylbenzenesulphonate | Not applicable |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available |
| Triethanolamine dodecylbenzenesulfonate | No data available |
| methanol | No data available |
| 3(2H)-Isothiazolone, 2-octyl- | No data available |
| 2-methyl-2H-isothiazol-3-one | No data available |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|---|-------------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available |
| sodium alkylbenzenesulphonate | Not applicable |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available |
| Triethanolamine dodecylbenzenesulfonate | No data available |
| methanol | No data available |
| 3(2H)-Isothiazolone, 2-octyl- | No data available |
| 2-methyl-2H-isothiazol-3-one | No data available |

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Endocrine disrupting properties - Human data, if available:

11.2.2 Other information

No other relevant information available.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|------------------|-------------------|----------------------------|---------------------|-------------------|
| C12-14 alcohols, ethoxylated (7EO) | LC ₅₀ | > 1 - 10 | <i>Brachydanio rerio</i> | Read across | 96 |
| sodium alkylbenzenesulphonate | LC ₅₀ | 1.67 | <i>Fish</i> | EPA-OPPTS 850.1075 | 96 |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | LC ₅₀ | 7.1 | <i>Fish</i> | OECD 203 (EU C.1) | 96 |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | |
| methanol | | No data available | | | |
| 3(2H)-Isothiazolone, 2-octyl- | LC ₅₀ | 0.122 | | | |
| 2-methyl-2H-isothiazol-3-one | LC ₅₀ | 4.77 | <i>Oncorhynchus mykiss</i> | Similar to OECD 203 | 96 |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value | Species | Method | Exposure |
|---------------|----------|-------|---------|--------|----------|
|---------------|----------|-------|---------|--------|----------|

Persil Professional Biological Liquid

| | | (mg/l) | | | time (h) |
|---|------------------|-------------------|-----------------------------|-------------------|----------|
| C12-14 alcohols, ethoxylated (7EO) | EC ₅₀ | > 1 - 10 | <i>Daphnia magna Straus</i> | Method not given | 48 |
| sodium alkylbenzenesulphonate | LC ₅₀ | 2.9 | <i>Daphnia</i> | OECD 202 (EU C.2) | 48 |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | No data available | | | |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | |
| methanol | | No data available | | | |
| 3(2H)-Isothiazolone, 2-octyl- | LC ₅₀ | 0.181 | | | |
| 2-methyl-2H-isothiazol-3-one | LC ₅₀ | 0.93-1.9 | <i>Daphnia magna Straus</i> | Method not given | 48 |

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|--------------------------------|-------------------|----------------------------------|--|-------------------|
| C12-14 alcohols, ethoxylated (7EO) | NOEC | > 0.1 - 1 | <i>Not specified</i> | DIN 38412, Part 9 OECD 201 (EU C.3) | |
| sodium alkylbenzenesulphonate | E _b C ₅₀ | 47.3 | <i>Not specified</i> | Non guideline test | 72 |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | No data available | | | |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | |
| methanol | | No data available | | | |
| 3(2H)-Isothiazolone, 2-octyl- | EC ₅₀ | 0.15 | | | |
| 2-methyl-2H-isothiazol-3-one | EC ₅₀ | 0.158 | <i>Selenastrum capricornutum</i> | Method not given | 72 |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|---|----------|-------------------|---------|--------|----------------------|
| C12-14 alcohols, ethoxylated (7EO) | | No data available | | | |
| sodium alkylbenzenesulphonate | | No data available | | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | No data available | | | |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | |
| methanol | | No data available | | | |
| 3(2H)-Isothiazolone, 2-octyl- | | No data available | | | |
| 2-methyl-2H-isothiazol-3-one | | No data available | | | |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|---|------------------|-------------------|-------------------------|----------|---------------|
| C12-14 alcohols, ethoxylated (7EO) | | > 1000 | <i>Activated sludge</i> | DEV-L2 | |
| sodium alkylbenzenesulphonate | EC ₅₀ | 550 | <i>Bacteria</i> | OECD 209 | 3 hour(s) |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | No data available | | | |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | |
| methanol | | No data available | | | |
| 3(2H)-Isothiazolone, 2-octyl- | | No data available | | | |
| 2-methyl-2H-isothiazol-3-one | EC ₂₀ | 2.8 | <i>Activated sludge</i> | OECD 209 | 3 hour(s) |

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|---|------------------|-------------------|----------------------------|------------------|---------------|------------------|
| C12-14 alcohols, ethoxylated (7EO) | EC ₅₀ | 10-100 | <i>Not specified</i> | Method not given | 96 hour(s) | |
| sodium alkylbenzenesulphonate | NOEC | 0.23 | <i>Oncorhynchus mykiss</i> | Method not given | 72 day(s) | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | No data available | | | | |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | | |

Persil Professional Biological Liquid

| | | | | | | |
|-------------------------------|--|-------------------|--|--|--|--|
| methanol | | No data available | | | | |
| 3(2H)-Isothiazolone, 2-octyl- | | No data available | | | | |
| 2-methyl-2H-isothiazol-3-one | | No data available | | | | |

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|---|------------------|-------------------|----------------------|------------------|---------------|------------------|
| C12-14 alcohols, ethoxylated (7EO) | EC ₅₀ | 10-100 | <i>Not specified</i> | Method not given | 48 hour(s) | |
| sodium alkylbenzenesulphonate | NOEC | 1.41 | <i>Daphnia magna</i> | OECD 211 | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | No data available | | | | |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | | |
| methanol | | No data available | | | | |
| 3(2H)-Isothiazolone, 2-octyl- | | No data available | | | | |
| 2-methyl-2H-isothiazol-3-one | | No data available | | | | |

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

| Ingredient(s) | Endpoint | Value (mg/kg dw sediment) | Species | Method | Exposure time (days) | Effects observed |
|---|----------|---------------------------|---------|--------|----------------------|------------------|
| C12-14 alcohols, ethoxylated (7EO) | | No data available | | | | |
| sodium alkylbenzenesulphonate | | No data available | | | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | No data available | | | | |
| Triethanolamine dodecylbenzenesulfonate | | No data available | | | | |
| methanol | | No data available | | | | |
| 3(2H)-Isothiazolone, 2-octyl- | | No data available | | | | |
| 2-methyl-2H-isothiazol-3-one | | No data available | | | | |

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical method | DT ₅₀ | Method | Evaluation |
|---|--------------------------|----------------------------|---------------------|-----------|-----------------------|
| C12-14 alcohols, ethoxylated (7EO) | | CO ₂ production | > 60 % in 28 day(s) | OECD 301B | Readily biodegradable |
| sodium alkylbenzenesulphonate | Activated sludge, aerobe | CO ₂ production | 85 % in 28 day(s) | OECD 301B | Readily biodegradable |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | | CO ₂ production | 77-79% in 28 day(s) | OECD 301D | Readily biodegradable |
| Triethanolamine dodecylbenzenesulfonate | Activated sludge, | | 69% | OECD 301B | Readily biodegradable |

Persil Professional Biological Liquid

| | | | | | |
|-------------------------------|--------|--|--|--------------------|----------------------------|
| | aerobe | | | | |
| methanol | | | | OECD 301B | Readily biodegradable |
| 3(2H)-Isothiazolone, 2-octyl- | | | | Weight of evidence | Not readily biodegradable. |
| 2-methyl-2H-isothiazol-3-one | | | | Other | Readily biodegradable |

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

| Ingredient(s) | Medium & Type | Analytical method | DT ₅₀ | Method | Evaluation |
|------------------------------|-----------------------|---------------------|--------------------|----------|---------------|
| 2-methyl-2H-isothiazol-3-one | Surface water (fresh) | Mineralisation rate | > 50 % in 4 day(s) | OECD 309 | Biodegradable |

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log K_{ow})

| Ingredient(s) | Value | Method | Evaluation | Remark |
|---|-------------------|------------------|-----------------------------------|--------|
| C12-14 alcohols, ethoxylated (7EO) | No data available | | No bioaccumulation expected | |
| sodium alkylbenzenesulphonate | 3.32 | Method not given | Low potential for bioaccumulation | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | | | |
| Triethanolamine dodecylbenzenesulfonate | No data available | | | |
| methanol | No data available | | | |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | | | |
| 2-methyl-2H-isothiazol-3-one | -0.32 | OECD 107 | No bioaccumulation expected | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|---|-------------------|---------|------------------|------------------------------------|--------|
| C12-14 alcohols, ethoxylated (7EO) | No data available | | | | |
| sodium alkylbenzenesulphonate | 2-1000 | | Method not given | High potential for bioaccumulation | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | | | | |
| Triethanolamine dodecylbenzenesulfonate | No data available | | | | |
| methanol | No data available | | | | |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | | | | |
| 2-methyl-2H-isothiazol-3-one | 3.16 | | OECD 305 | | |

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

| Ingredient(s) | Adsorption coefficient Log K _{oc} | Desorption coefficient Log K _{oc} (des) | Method | Soil/sediment type | Evaluation |
|---|--|--|--------|--------------------|----------------------------------|
| C12-14 alcohols, ethoxylated (7EO) | No data available | ≥ 4 | | | Potential for adsorption to soil |
| sodium alkylbenzenesulphonate | No data available | | | | |
| Alcohols C12-14, ethoxylated (3EO), sulphated, sodium salts | No data available | | | | |
| Triethanolamine dodecylbenzenesulfonate | No data available | | | | |
| methanol | No data available | | | | |
| 3(2H)-Isothiazolone, 2-octyl- | No data available | | | | |
| 2-methyl-2H-isothiazol-3-one | No data available | | | | |

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Persil Professional Biological Liquid**Waste from residues / unused products:**

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

European Waste Catalogue:

20 01 29* - detergents containing dangerous substances.

Empty packaging**Recommendation:**

Dispose of observing national or local regulations.

Suitable cleaning agents:

Water, if necessary with cleaning agent.

SECTION 14: Transport information**Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)**

14.1 UN number or ID number: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods

14.3 Transport hazard class(es): Non-dangerous goods

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods

14.6 Special precautions for user: Non-dangerous goods

14.7 Maritime transport in bulk according to IMO instruments: Non-dangerous goods

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations :**

- Regulation (EC) 1907/2006 - REACH (UK amended)
- Regulation (EC) 1272/2008 - CLP (UK amended)
- Regulation (EC) 648/2004 - Detergents regulation (UK amended)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to Detergents Regulation

anionic surfactants

5 - 15 %

non-ionic surfactants, soap, polycarboxylates

< 5 %

perfumes ,Limonene, Citronellol, optical brighteners, Methylisothiazolinone, enzymes,

Octylisothiazolinone

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents (UK amended). Data to support this assertion are held at the disposal of the competent authorities of the UK and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Comah - classification: Not classified

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MSDS5812

Version: 16.3

Revision: 2024-08-08

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 3, 8, 9, 16

Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Persil Professional Biological Liquid**Abbreviations and acronyms:**

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- ATE - Acute Toxicity Estimate
- DNEL - Derived No Effect Limit
- EC50 - effective concentration, 50%
- ERC - Environmental release categories
- EUH - CLP Specific hazard statement
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LCS - Life cycle stage
- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organisation for Economic Cooperation and Development
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- PROC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- H225 - Highly flammable liquid and vapour.
- H301 - Toxic if swallowed.
- H302 - Harmful if swallowed.
- H311 - Toxic in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H315 - Causes skin irritation.
- H317 - May cause an allergic skin reaction.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H330 - Fatal if inhaled.
- H331 - Toxic if inhaled.
- H370 - Causes damage to organs.
- H400 - Very toxic to aquatic life.
- H410 - Very toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.
- EUH071 - Corrosive to the respiratory tract.

End of Safety Data Sheet